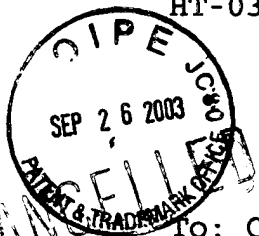




HT-03-004



September 24, 2003

To: Commissioner for Patents  
P.O.Box 1450  
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572  
28 Davis Avenue  
Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/613,598 07/03/03

Kenichi Takano

DOUBLE LAYER LONGITUDINAL BIAS  
STRUCTURE

Grp. Art Unit: \_\_\_\_\_

#### INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation  
In An Application.

The following Patents and/or Publications are submitted to  
comply with the duty of disclosure under CFR 1.97-1.99 and  
37 CFR 1.56. Copies of each document is included herewith.

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service as first class  
mail in an envelope addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450, on September 26, 2003.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

Stephen B. Ackerman 9/26/03

U.S. Patent 6,542,341 to Carey et al., "Magnetic Sensors Having an Antiferromagnetic Layer Exchange/Coupled to a Free Layer," describes an additional bias field that balances the total transverse internal magnetic field.

U.S. Patent 6,396,669 to Gill, "AP Pinned PTMN Spin Valve Read Head Biased for Playback Symmetry and Magnetic Stability," discloses a spin valve sensor of a read head having a platinum manganese (PtMn) pinning layer that pins a magnetic moment of an antiparallel (AP) pinned layer structure.

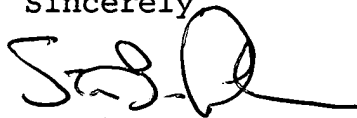
U.S. Patent 6,362,941 to Gill, "Spin Valve Sensor Having Free Layer Stabilized by Ferromagnetic and Sense Current Fields," provides a horizontal component of a ferromagnetic coupling field on the free layer of a spin valve sensor in the same direction as a longitudinal hard biasing field for magnetically stabilizing the free layer.

U.S. Patent 6,338,899 to Fukuzawa et al., "Magnetoresistance Effect Element, Magnetic Head, Magnetic Head Assembly, Magnetic Storage System," discloses a high-sensitivity and high-reliability magnetoresistance effect device (MR device) in which bias point designing is easy, and also a magnetic head, a magnetic head assembly and a magnetic recording/reproducing system incorporating the MR device.

U.S. Patent 6,517,896 to Horng et al., "Spin Filter Bottom Spin Valve Head with Continuous Spacer Exchange," discloses a high performance specular free layer bottom spin valve.

U.S. Patent 6,313,973 to Fuke et al., "Laminated Magneto-restrictive Element of an Exchange Coupling Film, an Antiferromagnetic Film and a Ferromagnetic Film and a Magnetic Disk Drive Using Same," discloses a magnetoresistive element having an exchange coupling film utilizing an exchanging coupling between an antiferromagnetic film and a ferromagnetic film, a magnetic head using the magnetoresistive element, and a magnetic disk drive using the magnetic head.

Sincerely

A handwritten signature in black ink, appearing to read 'SBA', with a long horizontal stroke extending to the right.

Stephen B. Ackerman,  
Reg. No. 37761

Form PTO-1449

INFORMATION DISCLOSURE CITATION  
ON AN APPLICATION

SEP 26 2003

(Several sheets if necessary)

Doc No. (Number (Copies))

HT-03-004

Application Number

10/613,598

Applicant

Kenichi Takano

Filing Date

07/03/03

Drawn Art Unit

## U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	TITLE	CLASS	SUBCLASS	ALSO DATE & APPROPRIATE
	6542341	4/1/03	Carey et al.	360	324	11/18/99
	6517896	2/11/03	Horing et al.	427	123	8/7/00
	6396669	5/28/02	Gill	360	319	2/8/00
	6362941	3/26/02	Gill	360	324.11	3/15/99
	6338899	1/15/02	Fukuzawa et al.	428	332	6/14/99
	6313973	11/6/01	Fuke et al.	360	324.1	6/30/99

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)


EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant